

THE LARGER MOTHS OF DAWLISH WARREN, DEVON

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Introduction

DAWLISH WARREN, in the county of Devon, is an unusual double sand spit, about 1.5 miles long forming part of the estuary of the river Exe. It is the largest sand dune system in Devon. The spit and surrounding area are of great importance to wildlife both vertebrate and invertebrate being an internationally important site for wading birds and wildfowl. The site contains a Local Nature Reserve and most of Dawlish Warren and the intertidal surrounds are designated a Site of Special Scientific Interest (SSSI), forming part of the Exe Estuary's Special Protection Area and RAMSAR wetland of international importance.

A sketch map of the area is shown in figure 1.

The habitat is varied and includes sandy beach, mobile dune, fixed dune with grass and heathland, scrub, damp meadow, reedbed, freshwater ponds, saltmarsh, mudflat, stony and waste ground.

According to a recent survey (de Lemos, 1992) there are 350 species of flowering plant, of which three are rare, 29 scarce and 87 notable in Devon. 250 species of fungi have been found of which ten are rare or restricted, two were new to Britain, and five new to science! Thirty-six species of mosses and liverworts have been recorded.

There are good stands of sallow and alder with birch and a few isolated oaks – including pedunculate, turkey and holm oaks. Isolated specimens of ash and sycamore can be found, but elm and beech are absent. A few conifers are present.

There is a good growth of the Ericacea on the golf course with some small encroachment onto the main dune.

The survey

Despite its importance and attractiveness as an entomological habitat there has been no systematic attempt to record the lepidopterous fauna of the Warren. Isolated records can be found in the literature. The Dawlish Warren Nature Reserve maintains a card index of reported species, which includes moths.

Status of records

When regular light trapping commenced at the Warren, it was hoped to amalgamate all records to form a definitive list. Scrutiny of the historic records revealed the presence of a considerable number of highly improbable species, and it was felt that these could not be uncritically incorporated into a list. It was therefore decided to split the list into three sections:

- species recorded and personally confirmed by the author;
- species which have been recorded and are likely to occur, but which have not been personally confirmed by the author;
- species for which records exist, but whose occurrence is highly improbable.

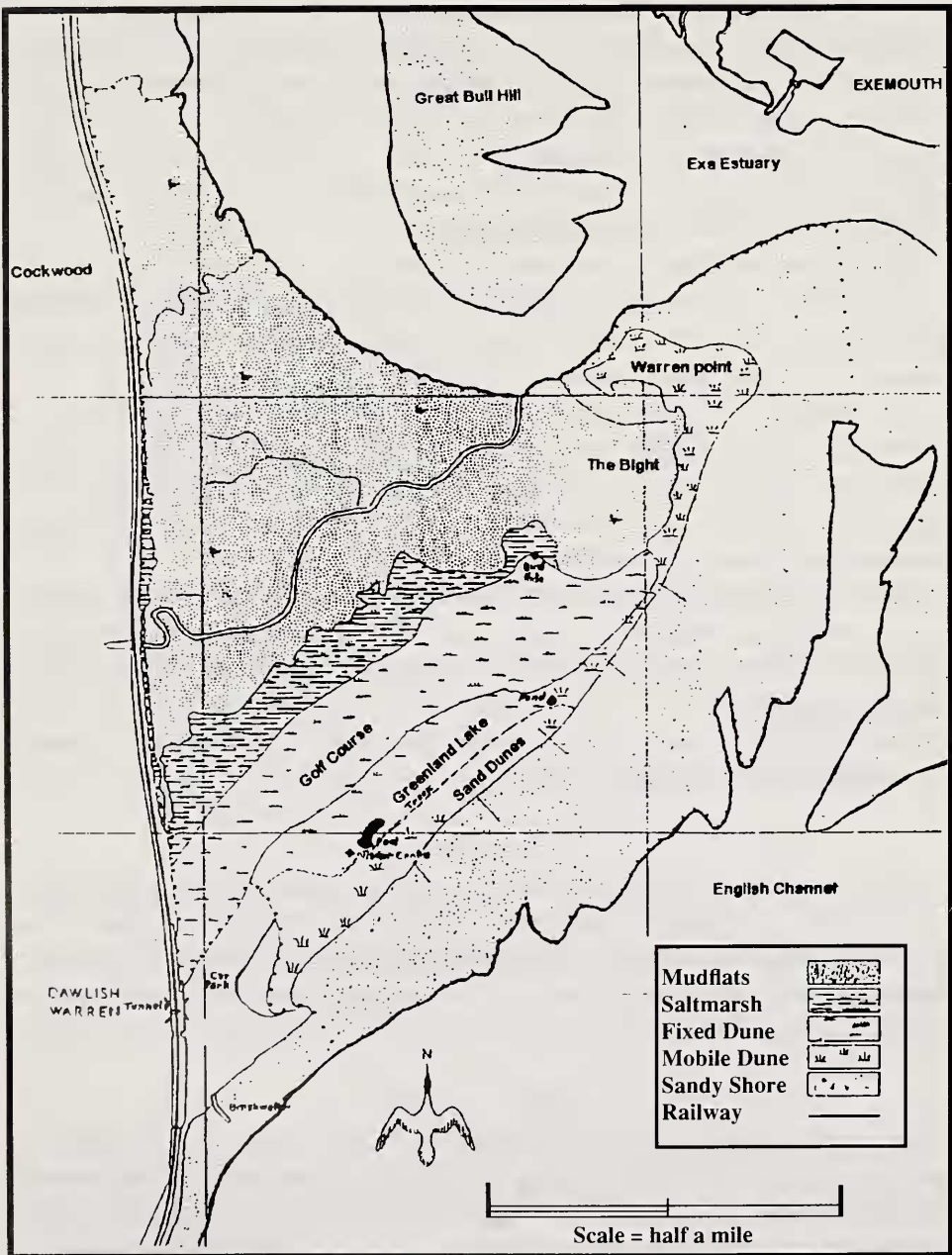


Figure 1. The Dawlish Warren Nature Reserve, Devon. SX 9879

For each species listed a brief note of its distribution and abundance within the British Isles is given. There is insufficient data to comment of the abundance of most species with the Warren itself. Larval foodplants are included for interest. These are taken from the national literature and do not necessarily reflect the natural foodplant within the Warren.

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PART 1

Records from Dawlish Warren based upon confirmed sightings in the period from 1982-1995.

HEPIALIDAE

- 0017 *Hepialus lupulinus* Linn. Common swift
Common resident; larva feeds on roots of grasses and other plants.

COSSIDAE

- 0161 *Zeuzera pyrina* Linn. Leopard
A widespread species in England as far north as Yorkshire; two records for the Warren. The larva feeds internally over a number of years in a range of trees such as Apple and Pear.

ZYGAENIDAE

- 0169 *Zygaena filipendulae* ssp. *anglicola* Trem. Six Spot Burnet
Common resident; larva feeds on Birds-foot Trefoil.
- 0170 *Z. trifolii* ssp. *decreta* Verity. Five spot burnet.
A widespread and often common species in south-west England; larva feed on *Lotus uliginosus*.

SESIIDAE

- 0371 *Sesia bembiciformis* Hb. Lunar Hornet Clearwing
Widespread but locally common throughout the British Isles; larva feeds internally in Sallow; old exit holes were found by Dr B. Henwood in 1992.

PYRALIDAE

- 1293 *Chrysoteuchia culmella* Linn.
Common resident, larva feeds on culms of various grasses forming silken galleries.
- 1294 *Crambus pascuella* Linn.
A common resident throughout the country; the early stages are apparently undescribed.
- 1302 *C. perlella* Scop.
Common resident and migrant; larva feeds on bases of stems of grasses from a silken tube.
- 1304 *Agriphila straminella* D. & S.
Common resident; larva feeds on grasses especially Sheep's Fescue.
- 1305 *A. tristella* D. & S.
Common resident especially where tall grasses abound; larva feeds on bases of grass stems.
- 1306 *A. inquinatella* D. & S.
Common resident; larva feeds on roots and bases of smaller grasses, especially Sheep's Fescue.
- 1307 *A. latistria* Haw.
Local but fairly common where it occurs; small numbers seen on the Warren; larva feeds on roots of grasses especially *Bromus* ssp.
- 1309 *A. geniculea* Haw.
Common resident; larva feeds on grasses.
- 1313 *Catoptria pinella* Linn.
Widespread but local resident; larva feeds in dense tufts of Cotton Grass, Tufted-hair Grass and other grasses.
- 1323 *Pediasia contaminella* Hb.
Recorded from Devon (*Ent. Rec.* **106**: 14) and formerly by T. Dobson 25.7.1990 and 17.7.1991. Local on dry grassland; larva feeds on Sheep's-fescue Grass and other grasses. Noted in some numbers and probably breeding on the Warren.

- 1329 *Schoenobius forficella* Thunb.
Locally fairly common resident; larva feeds on Common Reed, Sweet-grass and sedges.
- 1332 *Scoparia subfusca* Haw.
Common throughout the British Isles; larva feeds on roots of Ox-tongue and Colts-foot.
- 1336 *Eudonia pallida* Curt.
Widespread resident, sometimes common as on the Warren; larva unknown; supposed to feed on mosses and lichens.
- 1338 *Dipleurina lacustrata* Panzer
Common resident; larva feeds on mosses attached to stone walls and tree trunks.
- 1344 *E. mercurella* Linn.
Common resident; larva feeds on mosses in most situations.
- 1350 *Parapoynx stagnata* Don. Beautiful China-mark
Common near water; larva, aquatic, feeds on Reeds, Water Lilies and other plants.
- 1356 *Evergestis forficalis* Linn. Garden Pebble
Common resident; larva feeds on Cruciferae and can be a pest.
- 1375 *Ostrinia nubilalis* Hb. European Corn-boxer
Formerly a very rare immigrant but now firmly established but mainly in the south-east; the species is to be found in Hampshire and now Devon.
- 1376 *Eurrhynx hortulata* Linn. small Magpie
Common resident; larva feeds on Common Nettle and other plants.
- 1378 *E. coronata* Hufn.
Common resident; larva feeds on Elder.
- 1385 *Ebulea crocealis* Hb.
Widespread and locally common; larva feeds on Fleabane in marshy areas.
- 1390 *Udea prunalis* D. & S.
Common resident; larva feeds on a variety of foodplants including bramble, Elder, Nettle, Dogs Mercury, Deadnettle and several others.
- 1395 *U. ferrugalis* Hb.
A migrant species which probably breeds during the warmer months; larva feeds on a wide variety of low growing plants.
- 1397 *Mecyna asinalis* Hb.
Resident, mainly associated with the west of the British Isles; larva feeds on Wild Madder.
- 1398 *Nomophila noctuella* D. & S. Rush Veneer
A migrant species which probably breeds during the warmer months; larva feeds on Clover and Knotgrass.
- 1405 *Pleuroptya ruralis* Scop. Mother of Pearl
Common resident; larva feeds on Common Nettle.

- 1413 *Hypsopygia costalis* Fabr. Gold Triangle
Locally common resident; larva feeds on stored clover and hay, and in Squirrels dreys and probably thatch.
- 1414 *Synaphe punctalis* Fabr.
Common resident; larva feeds on terrestrial mosses.
- 1424 *Endorhiza flammealis* D. & S.
Common resident; larva feeds on Greater Birds-foot Trefoil and several species of deciduous trees and shrubs.
- 1428 *Aphomia sociella* Linn. Bee Moth
Common resident; larva feeds on cells of wasps and bees (usually *Bombus* sp.) nests and occasionally on detritus.
- 1432 *Anerastia lotella* Hb.
A.H. Dobson, 26.6.1961. *Devon Association Ent. Section* 14th report; larva feeds amongst rootstock of grasses such as Sheep's Fescue and Marram. Recorded recently in July 1994 and on 24.6.1995.
- 1469 *Numonia advenella* Zinck.
Locally common but few seen on the Warren; larva feeds on Hawthorn and Rowan.
- 1443 *Pempelia genistella* Dup.
Very local on south coast localities and probably breeding on the Warren; larva feeds on Gorse.
- 1452 *Phycita roborella* D. & S.
Locally common in Oakwoods but often found in other habitat; larva feeds on Oak, Pear and Crab Apple.
- 1458 *Myelois cribella* Hb. Thistle Ermine
Locally common resident; larva feeds on thistle.
- 1484 *Phycitodes saxicola* Vaugh.
Widespread on the coast; several seen on the Warren; larva feeds on flowers of Compositae.

PTEROPHORIDAE

- 1495 *Marasmarcha lunaedactyla* Haw.
Common resident; larva feeds on Rest-harrow.
- 1524 *Emmelina monodactyla* Linn.
Common resident; larva feeds on Lesser Bindweed.

HESPERIIDAE

- 1526 *Thymelicus sylvestris* Poda. Small Skipper
Common resident; larva feeds on grasses.
- 1531 *Ochlodes venata* Brem, & Grey, Large Skipper
Common resident, larva feeds on grasses.

PIERIDAE

- 1545 *Colias croceus* Geoffr. Clouded Yellow
A migrant species seen in most years in southern England and

beyond, breeding when conditions permit; larva feeds on Clovers and Trefoils but cannot survive the winter.

- 1546 *Gonepteryx rhamni* Linn. The Brimstone
Identified by Mr & Mrs Normand in August 1986; larva feeds on Buckthorn and Alder Buckthorn and is usually a common species where its foodplant occurs.
- 1549 *Pieris brassicae* Linn. Large White
Common resident and migrant; larva feeds on *Brassicae* ssp.
- 1550 *P. rapae* Linn. Small White
Common resident; larva feeds on *Brassicae* ssp. and *Nasturtium*.
- 1551 *P. napi* Linn. Green-veined White
Common resident; larva feeds on *Cruciferae* ssp. and other plants.
- 1553 *Anthocharis cardamines* Linn. Orange Tip
Common resident; larva feeds on Hedge Mustard and *Cruciferae* ssp.

LYCAENIDAE

- 1555 *Callophrys rubi* Linn. Green Hairstreak
Recorded in *Devon Butterflies* and seen by Mr Normand in 1990; in the main the butterfly is generally distributed; larva feeds on a wide variety of plants including Gorse, Broom and Birds-foot Trefoil.
- 1561 *Lycaena phlaeas* Linn. Small Copper
Common resident; larva feeds on Docks and Sorrels.
- 1571 *Plebejus argus* ssp. *argus* Linn. Silver-studded Blue
Specimen captured by W.A. Eley on 29.8.81 and now in the collection of Clifton Park Museum, Rotherham; larva feeds on Sheep's-fescue Grass.
- 1574 *Polyommatus icarus* ssp. *icarus* Rott. Common Blue
Common resident; larva feeds on Birds-foot Trefoil.
- 1580 *Celastrina argiolus* Linn. Holly Blue
A widespread species that has been found in many areas in Devon; recorded by Mr Normand in 1992; larva feeds on Holly and Ivy.

NYMPHALIDAE

- 1590 *Vanessa atalanta* Linn. Red Admiral
An annual and usually common migrant that breeds here in the spring and summer months; it probably overwinters as an adult. Larva feeds on Nettle and Pelitory.
- 1591 *Cynthia cardui* Linn. Painted Lady
A common migrant species which breeds when conditions permit; larva feeds on Thistles and other plants. Imago is not known to hibernate here.
- 1593 *Aglais urticae* Linn. Small Tortoiseshell
Common resident; larva feeds on Common Nettle.
- 1596 *Nymphalis antiopa* Linn. Camberwell Beauty
An uncommon migrant species; recorded by Mr Normand on 26.7.82.
- 1597 *Inachis io* Linn. The Peacock
Common resident; larva feeds on Nettle.

- 1598 *Polygonia c-album* Linn. The Comma
Widespread and relatively common throughout Devon and other counties; larva feeds on Nettle, Hop and Elm.

SATYRIDAE

- 1614 *Pararge aegaria* Linn. Speckled Wood
Common resident; larva feeds on grasses.
- 1615 *Lasiommata megera* Linn. Wall Brown
Uncommon resident; with a few recorded on the Warren; larva feeds on grasses.
- 1620 *Melanargia galathea* Linn. Marbled White
Recorded in *Devon Butterflies* and seen by Mr Normand in 1992, on the grassy area near the bird hide; larva feeds on grasses.
- 1625 *Pyronia tithonus* Linn. The Gatekeeper
Common resident; larva feeds on grasses.
- 1626 *Maniola jurtina* ssp. *insularis* Thompson. Meadow Brown
Common resident; larva feeds on grasses.
- 1634 *Malacosoma neustria* Linn. Lackey
Common resident; larva feeds on a wide variety of trees and shrubs.

LASIOCAMPIDAE

- 1637 *Lasiocampa quercus* ssp. *quercus* Linn. Oak Eggar
Locally widespread resident; larva feeds on a wide variety of trees and shrubs including Bramble and Sallow.
- 1640 *Philudoria potatoaria* Linn. Drinker
Common resident; larva feeds on various grasses and reeds.

DREPANIDAE

- 1645 *Falcaria lacertinaria* Linn. Scalloped Hook Tip
Widely distributed and moderately common over much of the British Isles; larva feeds on Birch.
- 1646 *Drepana binaria* Hufn. Oak Hook Tip
Common resident; larva feeds on oak.
- 1648 *D. falcataria* Linn. Pebble Hook Tip
Common resident; larva feeds on Birch and occasionally Alder.

THYATIRIDAE

- 1652 *Thyatira batis* Linn. Peach Blossom
Common resident; larva feeds on Bramble.
- 1653 *Habrosyne pyritoides* Hufn. Buff Arches
Common resident; larva feeds on Bramble.
- 1654 *Tethea ocularis* ssp. *octogesimea* Hb. Figure Of Eighty
Widespread in southern England and several seen on the Warren; larva feeds on Poplar and Aspen.
- 1657 *Ochropacha duplaris* Linn. Common Lutestring
Widely distributed with a few seen on the Warren; larva feeds on Birch, Oak and Alder.